

Notice of Allowability

Application No.

10/062,686

Examiner

Walter F Briney III

Applicant(s)

NORDIN ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the response after a Non-Final Office Action, filed 18 October 2005.
2. ☒ The allowed claim(s) is/are 1-20.
3. ☒ The drawings filed on 31 January 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview and a subsequent E-mail with Robert Brill on 03 February 2005.

The application has been amended as follows:

11. (currently amended) A method for use in a DSL-compatible POTS line card connected to a subscriber line, said method comprising the steps of:

determining whether a DSL line card is connected to said subscriber line by measuring an impedance at DSL frequencies;

loading a digital signal processor located in the DSL-compatible POTS line card with a first set of parameters if a DSL line card is connected to said subscriber line; and

loading a digital signal processor with a second set of parameters if a DSL line card is not connected to said subscriber line.

14. (currently amended) A method for use in a DSL-compatible POTS line card connected to a subscriber line, said method comprising the steps of:

determining whether a DSL line card is connected to said subscriber line;

wherein said step of determining comprises: measuring energy in a DSL frequency range and basing said determination on the presence of energy;

loading a digital signal processor located in the DSL-compatible POTS line card with a first set of parameters if a DSL line card is connected to said subscriber line; and
loading a digital signal processor with a second set of parameters if a DSL line card is not connected to said subscriber line.

15. (currently amended) A method for use in a DSL-compatible POTS line card connected to a subscriber line, said method comprising the steps of:

determining whether a DSL line card is connected to said subscriber line;
wherein said step of determining comprises: monitoring said subscriber line for DSL pilot tone;

loading a digital signal processor located in the DSL-compatible POTS line card with a first set of parameters if a DSL line card is connected to said subscriber line; and
loading a digital signal processor with a second set of parameters if a DSL line card is not connected to said subscriber line.

The following is an examiner's statement of reasons for allowance:

In the previous Non-Final Office Action, filed 27 July 2004, claims 3 and 6 were objected to as being dependent on a rejected claim, but would be allowable if rewritten in independent form.

Claim 1 has been amended to include the elements of claim 3 that differentiate the current invention from the cited prior art. In particular, *a means for detecting whether a DSL line card is connected to said subscriber line based on an impedance measurement at DSL frequencies*. The previous rejection of claim 1 relied upon the fact

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that a POTS SLIC that measured line impedance would inherently detect the presence of a DSL SLIC because it inherently affects the subscriber line's load characteristics. However, there could be no found no suggestion in the cited prior art to modify the impedance measuring SLIC to measure impedances outside of the POTS band as seen in the reasons of allowance for claim 3. Thus, claim 1, as amended, is allowable over the cited prior art.

Claims 2-5 and 8-10 are dependent on claim 1, and are allowable over the cited prior art for at least the same reasons.

Claim 6 has been rewritten in independent form and is allowable over the cited prior art for the reasons presented in the previous Office Action.

Claim 7 is dependent on claim 6, and is allowable over the cited prior art for at least the same reasons.

Claim 17 is essentially the same as claim 1, and is allowable over the cited prior art for at least the same reasons.

Claims 18-20 are dependent on claim 17, and are allowable over the cited prior art for at least the same reasons.

Claims 11, 14, and 15 are directed towards methods for determining the presence of a DSL SLIC. These claims present methods that are inherently performed by the apparatuses of claims 1, 6, and 17, but have been amended to recite that the digital signal processor that is loaded with a first or second set of parameters based on the DSL SLIC's presence is explicitly located within the POTS SLIC. Thus, the POTS SLIC from the preamble limits the scope to which the method of claims 11, 14, and 15 is

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applicable. It follows that DSL detection methods, such as those disclosed by Linder et al. (US Patent 6,633,628) and Scholtz et al. (US Patent 6,301,337), which describe monitoring impedance and pilot tones, respectively, are not applicable or relevant as they are incorporated in customer premises equipment, and fail to provide motivation to modify a POTS SLIC. Thus, claims 11, 14, and 15 are allowable over the cited prior art.

Claims 12, 13, and 16 are dependent on claim 11, and are allowable over the cited prior art for at least the same reasons.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter F Briney III whose telephone number is 703-305-0347. The examiner can normally be reached on M-F 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 703-305-4040. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



SINH TRAN
SUPERVISORY PATENT EXAMINER

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